size particles.--;

line 9, change "the sensitivity" to --precision and--;

line 17 (last line on page 11), change "disc (CD) means, a" to --disk (CD) means.--.

Page 12, delete line 1 in its entirety;

line 2, change "12" to --11--;

line 3, change "laser beam source)" to --laser)--;

line 4, after "optic" insert --connecting--;

line 7, change "effective method and device, which provides" to --effective methods and device, which provide--;

line 9, change "of air" to --of air, gas--;

line 11, change "an improved" to --of improved--;

line 17, change "for improved amplitude" to --for an improved timing--;

line 18, change "(" to --,--.

Page 13, delete lines 1, 2 in their entirety;

line 3, change "unfocused" to --non-focused-- and after "in the" insert --some--;

line 4, delete ")";

line 5, after "of the" insert --often--;

line 6, after "detector" insert --and does not require the use of the power light beam source--.

***In the Claims:***

Cancel Claims 32-40 and substitute new Claims 41-46, as follows:

41. A method for counting and measuring particles illuminated by a light beam and including the steps of:

providing by a light detecting system an output which is effectively indicative of a size of said particles intersecting said light beam within a particle monitoring region of said light detecting system so that said particles are monitored within said particle monitoring region, and wherein a light, created by the intersection of said particles with said light beam, is proportional to said output;

amplifying said output by an amplifying means;

converting each amplified signal to a digital form pulse having an adequate duration with said output;

forming the strobe pulse packs by strobing of the digital form pulses by strobe pulses of a strobe pulse sequence, and wherein each strobe pulse pack contains at least one strobe pulse of said strobe pulse sequence;

counting a quantity of said strobe pulses within said each strobe pulse pack;

selecting and sorting a plurality of strobe pulse packs by an identical quantity of said strobe pulses within said each strobe pulse pack of said plurality of strobe pulse packs;

counting a quantity of the identical strobe pulse packs.

42. The method of claim 41, wherein said quantity of said strobe pulses within said each strobe pulse pack contains an information about particle size.

43. The method of claim 41, wherein said quantity of said identical strobe pulse packs contains an information about quantity of the identical size particles.

44. A method for counting and measuring a particles illuminated by a light beam and including the steps of:

providing a light detecting system, including a chamber, having a particle monitoring region;

providing a low power light source means forming said light beam directed through said particle monitoring region to a light detection means placed within said chamber on a light beam axis;

providing an intersection of said particles with said light beam at a point within said particle monitoring region so that said particles are monitored in said chamber, and wherein said intersection is occurred at said point located on said light beam axis and substantially in an area of said light detection means between the light source means and said light detection means;

non-optic imaging detecting of a light created by said intersection of said light beam with said particles flowing through said particle monitoring region of said light detecting system, and providing an output which is effectively indicative of a duration of said light proportional to a size of said particles;

amplifying and converting said output to the adequate duration digital form pulses;

processing said digital form pulses by strobing of said digital form pulses by strobe pulses of a strobe pulse sequence, and wherein a quantity of said strobe pulses within each digital form pulse is effectively indicative of the particle size.

45. The method of claim 44, wherein said chamber further is provided with an inside light absorbing black flat coating.

46. A device for counting and measuring particles illuminated by a light beam includes:

a light detecting system, providing a non-optic imaging detection of said particles and comprising

a chamber, having a particle monitoring region within which said light beam intersects said particles at a point on a light beam axis;

a low power light source means forming said light beam directed to said particle monitoring region so that said particles are monitored at said point;

a light detection means placed within said chamber on said light beam axis so that said point of said particle monitoring region is located substantially in the light detection means area between the light source means and said light detection means, and wherein said light detecting system provides an output which is effectively indicative of a duration of a light created by the intersection of said light beam with said particles and proportional to a size of said particles, and

a processing system, providing control functions and processing of said output and comprising